FEBRUARY 5.

Mr. CHARLES MORRIS in the chair.

Thirty-two persons present.

Messrs Joseph Leidy, J. P. Lesley, Persifor Frazer, Angelo Heilprin and W. B. Scott were elected to constitute the Committee on the Hayden Memorial Geological Award.

FEBRUARY 12.

Mr. WM. W. JEFFERIS in the chair.

Seventeen persons present.

The following papers were presented for publication:—

"New Species of Shells from New Hebrides." By W. D. Hartman, M. D.

"Note on Elagastis bipinnulatus." By Seth E. Meek and Charles H. Bollman.

FEBRUARY 19.

The President, Dr. JOSEPH LEIDY, in the chair.

Sixteen persons present.

The Sabre-tooth Tiger of Florida.—PROF. LEIDY directed attention to a specimen recently received from our fellow member, Joseph Willcox, now in Florida. Mr. Willcox writes that he found it in a limestone quarry and that it appeared to him to possess some interest. This it certainly does, as it proves to be the skull of that most formidable of felines, the extinct Sabre-tooth Tiger, variously described under the names of *Drepanodon, Machairodus* and *Smilodon.* The specimen consists of the nearly complete cranium with the greater portion of one side of the face, which has lost the teeth but retains all the alveoli. Of the molar teeth the first and last of the series had been shed and the alveoli obliterated. The skull indicates an animal approximating in size the existing Tiger and Lion. It also approximates in size that of *Machairodus neogaeus* of South America, than which it is rather more than an inch less in length, breadth and depth. It exhibits other slight differences, but all may be only of varietal or even individual significance. Regarding the specimen as indicating a distinct variety or species it may be named DREPANDON, or MACHAIRODUS FLORIDANUS. Its

sabre-tooth canine is of less breadth than in the former, and the hiatus in advance is considerably less, indicating a proportionately smaller inferior canine. The zygoma is absolutely deeper and flatter. Of *Machairodus neogaeus*, we possess the cast of a skull, from the bone-caverns of Brazil, the original of which is in the natural history museum of Paris. Dr. H. Burmeister has described and figured a complete skeleton of this species, from the pampas formation of the Argentine Republic, preserved in the museum of Buenos Ayres. Prof. Cope, in the "American Naturalist" of 1880, notices another skeleton from the same region, under the name of *Smilodon necator*. With Dr. Burmeister, Dr. Leidy regarded all these as pertaining to one species, and thought it probable that the Florida skull might also belong to the same.

Comparative measurements of the Florida skull, the cast of the Brazil skull and Dr. Burmeister's figures of the Argentine skull are given below, but some of them, from the imperfection of the means are to be regarded as only approximatively correct. The measurements are given in millemetres.

	Florida.	Argentine.	Brazil.
Length of skull from occipital condyles to incisive border . . .	285	330	330
Breadth of skull at widest part of zygoma	190	230	230?
Depth of skull at post-glenoid tubercle	125	164	160?
Length of skull from behind zygoma to incisive alveoli	210	245	225
Breadth at mastoid processes . .	126	143	140
Breadth of narrowest portion of cranium	57	57	
Breadth at occipital condyles . .	105	112	
Breadth of face at sectorial molars	150	170	
Breadth of face at canines . . .	94	112	110?
Fore and aft space of the teeth . .	140	146	163
Fore and aft space of two molars .	55	62	63
Transverse space of the incisors .	58	66	55
Breadth fore and aft of sectorial molar alveolus	37	43	42
Breadth fore and aft of second premolar alveolus	16	18	18
Breadth fore and aft of canine alveolus	40	45	53
Breadth transverse of canine alveolus	20	20	25
Breadth fore and aft of glenoid articulation	25	25	
Breadth transverse of glenoid articulation	50	50	
Depth of face at infra-orbital margin	60	55	53
Depth of zygoma	46	38	43

In association with the skull of the Tiger, Mr. Willcox found a cervical vertebra, six lower molars and five incisors of a Horse. They have the same appearance of preservation as the former and are probably cotemporary fossils, though they present no distinctive characters from the corresponding parts of the Domestic Horse. With them there was also found a lower molar of a Llama, *Auchenia minor.*

Linguatula Diesingii from the Sooty Mangabey.—Mr. J. E. Ives remarked that in preparing for maceration a specimen of *Cercocebus fuliginosus,* he found that the great omentum contained a large number of encysted specimens of *Lingaatula Diesingii.* The cysts occurred almost invariably in the fatty portions of the membrane. A few specimens also existed in the lungs and pleuræ, and in the peritoneal lining of the abdominal cavity. This form has not been recorded before from *Cercocebus fuliginosus.* In 1848, Van Beneden described the species from the mesentery of *Cynocephalus mormon.* In 1849, under the synonym of *Pentastomum tornatum* Creplin placed on record the finding of it by Gurlt in the greater omentum of *Macacus Cynomolgus,* and by Schultze in the omentum and mesentery of *Cynocephalus mormon.* In 1850, under the name of *Pentastomum euryzonum,* Diesing redescribed Van Beneden's form, and Dr. Leidy recorded it "from the surface of the liver beneath the peritoneum" in *Cynocephalus porcarius.* The monkey in which this parasite was found had recently died in the Zoological Garden, and had been presented to the Academy by the Society.

February 26.

Mr. Charles Morris in the chair.

Fourteen persons present.

The following papers were presented for publication:—

"On two minerals from Delaware Co., Penna." By F. A. Genth.

"Contribution to the Life-Histories of Plants, No. IV." By Thomas Meehan.

Mr. Edwin J. Houston, was elected a member.

The following were ordered to be printed:—